

REMARKS

The above-identified patent application has been amended and Applicants respectfully request the Examiner to reconsider and again examine the claims in view of the following remarks.

Claims 1-20 are pending in the application. No claims are yet allowed. Claims 1-9 are rejected. No claims are amended herein, no claims have been cancelled by this Amendment and new claims 10-20 have been added by this amendment.

In accordance with the revised provisions of 37 C.F.R. §1.121(c) as enacted on July 30, 2003, a marked up version of the amended claims is provided above.

The Examiner rejects Claims 1 under 35 U.S.C. §102(e) as being anticipated by Rahman (U.S. Patent No. 6,821,259).

To sustain a rejection under 35 U.S.C. §102, a single reference must disclose each and every element of the claimed invention. In this case, the Rahman reference fails to describe a sensing means fixed in at least one strap as called for in Claim 1. Rahman also neither describes nor suggests that the sensing means senses an EMG signal as called for in Claim 1.

In view of the above, Applicants submit that Claim 1 is patentably distinct over the cited reference and that the rejection of Claim 1 under U.S.C. §102(e) should be withdrawn.

The Examiner rejects Claims 2-5, 7 and 9 under 35 U.S.C. §103(a) as being unpatentable over Rahman (U.S. Patent No. 6,821,212) in view of Petrofsky (U.S. Patent No. 5,888,212). The Examiner asserts that Rahman discloses a powered orthotic in Figs. 1 and 3. The Examiner concedes that Rahman fails to disclose a means for scaling the sensor and an active feedback loop circuit. The Examiner asserts, however, that Petrofsky teaches a computer controlled hydraulic resistance device comprising a sensing and control in a closed loop manner and a means for scaling the sensor signal. The Examiner thus concludes that it would have been

obvious to combine the elements of Petrofsky with the system of Rahman. Applicants respectfully disagree.

Applicants would also like to point out that Figure 1 of Rahman does not show a power orthotic device as asserted by the Examiner. Rather, Fig. 1 of Rahman merely a schematic diagram used to illustrate a gravity balancing principle used by the present invention. This figure does not show a brace, a power orthotic device or a sensing means.

Similarly, Figure 3 of Rahman does not show a sensing means or an actuator. Column 6 lines 20-26 relied upon by the Examiner explicitly states that a sensing means and an actuator are not shown.

As the Examiner is aware, and as found in MPEP §2142, in order to establish a prima facie case of obviousness "...the prior art reference (or prior art references when combined) must teach or suggest all the claim limitations." Applicants respectfully submit that the Examiner has not met this burden in order to establish prima facie obviousness.

Claim 2 depends from and thus includes the limitations of Claim 1. Thus Claim 2 is patentably distinct over the combination relied upon by the Examiner since the combination neither describes nor suggests sensing means fixed in at least one strap nor sensing means for sensing an EMG signal as called for in Claim 1.

Claim 2 is further patentably distinct over the cited reference since the claim calls for sensing an EMG signal and determining a desired joint torque from the EMG signal as called for in Claim 2.

The Petrofsky reference (at Column 10, lines 12-14) states that "The system programs cause a resistance to be applied to the device depending on the sensed position and velocity" (emphasis supplied). Rahman does not discuss sensors. Thus, in view of at least the missing elements pointed out above in the combination of Rahman and Petrofsky, this combination cannot render obvious Applicants Claim 2.

Claims 3-5 and 7 also depend directly or indirectly from Claim 1 and thus are also patentably distinct over the cited references taken in combination at least for the reasons discussed above.

Claim 9 is patentably distinct over the cited reference since the reference neither describes nor suggests a sensing means which noninvasively senses a desired muscular force and provides a sensor signal in response thereto as called for in Claim 9.

Rahman does not show a sensing means and Petrofsky at Column 10, lines 12-14 describes a sensor which senses velocity and position.

Thus, Claim 9 is patentably distinct over the cited references.

The Examiner rejects Claims 6 and 8 under 35 U.S.C. §103(a) as being unpatentable over Rahman in view of Scorvo.

The Examiner asserts that Rahman discloses a powered orthotic in Figs. 1 and 3. The Examiner concedes that Rahman does not disclose a pneumatic activator but submits that Scorvo teaches a pneumatic actuator. As pointed out above, Applicants do not agree that Rahman discloses a powered orthotic as asserted by the Examiner.

Claims 6 and 8 each depend, either directly or indirectly, from base Claim 1. Thus, both Claims 6 and 8 call for sensing means fixed in at least one strap which sense EMG signals.

Since neither Rahman nor Scorvo describes sensing means fixed in a strap nor sensing an EMG signal, Applicants submit that Claims 6 and 8 are patentably distinct over the cited references.

Applicants have added new claims 10-20. Applicants submit that each of these claims are patentably distinct over the art cited by the Examiner.

In view of the above Remarks, Applicants submit that Claims 1-20 and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Response or this application.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

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Respectfully submitted,

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